



Couple Executes Elevation Project in Combating Flood

Full Mitigation Best Practice Story

Henderson County, Illinois

Henderson County, IL—In June 2008, residents in 21 counties suffered flood-related losses. While some homeowners began tearing down their homes, vowing never to rebuild in a local retirement community, Bill and Karen Opel will continue to enjoy the quiet life, free from the hustle and bustle of the big city, due to mitigation measures employed during the construction process of their home for retirement.



"My wife and I did everything in this house except lay the carpet," said Bill Opel, a retired carpenter. "We have made it through several floods, following the mitigation measures, without any major flood-related damages."

Before deciding to make the river town of Shokokon a permanent residence, Bill and Karen Opel had leased several properties in the area as vacation spots, starting in 1975. The town, a retirement community located on the Mississippi River, had a history of flood events. The couple had witnessed the devastation caused by flooding. Following one flooding event, they returned to find their trailer and its contents destroyed. So when the Opels decided to build their 1,064-square-foot, wood-frame home, they knew that it would have to be elevated.

"We were just coming down here on weekends to get away from the city and all the traffic. We lived in Peoria, Illinois," said Bill Opel. "A guy brought me here [Shokokon] to go duck hunting. That one time—that's all it took. Karen and I knew the town's flood history, but we got to liking it so much down here until we decided to move here permanently. We also knew that we had to be prepared."

The Opels began construction on their new home in April 1995 and moved into it in November of that same year. The home sits on 15, 12-foot steel pilings that are embedded 4 feet into the ground. Each piling has 5-foot lengths of rebar, held together with a wire basket tie, in the center.

The couple's home is elevated nearly 10 feet above the original slab-on-grade foundation. The open space beneath the house is for parking. Bill Opel noted that the elevation includes an additional 3½-feet freeboard that is higher than Henderson County's minimum code requirement.

"When we built in 1995, I got the Base Flood Elevation [BFE] for the area from a local official," reported Opel. "[At that time,] it was 25 feet for a 500-year flood." The BFE is the computed elevation to which floodwater is anticipated to rise during the base flood. BFEs are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles.

"We [have] stayed through all of the high-water events except the one in June [2008]. We didn't have any gas," said Opel. "The Illinois Commerce Commission passed a law that required the gas to be shut off during flooding events."

Alluding to the 2008 flood event, which warranted a Federal disaster declaration, Opel reported having approximately seven feet of water on his property. When the levee was breached, the water was about 18 inches from the bottom of the floor level. His next-door neighbor had four feet of water in her house. The river crested at 25.73 feet.

"We have residents who are tearing down their homes and planning to move completely out of the area than face another flood," added Karen.

"We have experienced five high-water events. It's no big deal," said Opel. "Once you get prepared for it, it's no big thing. If you are going to live down here, you need to prepare to do so."

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region V**

State: **Illinois**

County: **Henderson County**

City/Community: **Stronghurst**

Key Activity/Project Information

Sector: **Private**

Hazard Type: **Flooding**

Activity/Project Type: **Elevation, Structural**

Structure Type: **Wood Frame**

Activity/Project Start Date: **04/1995**

Activity/Project End Date: **11/2008**

Funding Source: **Homeowner**

Activity/Project Economic Analysis

Cost: **Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**

Federal Disaster #: **997 , 07/09/1993**

Federal Disaster Year: **1993**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **1771 , 06/24/2008**

Repetitive Loss Property? **Unknown**

Reference URLs

No URLs were submitted

Main Points

No Main Points were entered.



Bill and Karen Opel standing in front of their home located in the retirement village of Shokokon



Side view of two of fifteen, 12 foot pilings



Damage to home located adjacent to the Opels' home